WHAT IS CLAIMED IS:

1. A superconducting article, comprising:

a substrate;

a plurality of superconductor strips overlying the substrate, the superconductor strips comprising first and second superconductor strips adjacent each other; and

at least one conductive bridge electrically coupling at least the first and second conductive strips with each other, wherein the substrate has a dimension ratio of not less than about 10.

2. The superconducting article of claim 1, wherein the superconductor strips are generally parallel to each other.

3. The superconducting article of claim 1, wherein the superconductor strips are spaced apart from each other by an average gap width of at least 1μm.

4. The superconducting article of claim 3, wherein said average gap width is not less than about 5 μm.

5. The superconducting article of claim 3, wherein the superconductor strips are spaced apart from each other by a substantially constant gap.

6. The superconducting article of claim 1, wherein the first and the second superconductor strips have an average width of at least 5 μm.

7. The superconducting article of claim 5, wherein the first and second superconductor strips have substantially the same width.

8. The superconducting article of claim 1, wherein the conductive strips are generally co-planar with each other, forming a superconductor layer.

9. The superconducting article of claim 8, wherein the superconductor layer is formed by deposition to overlie the substrate.

10. The superconducting article of claim 8, wherein the superconductor layer is subjected photolithographic processing to form the superconductive strips.

11. The superconducting article of claim 10, wherein the photolithographic processing is effective to remove portions of the superconductor layer, leaving behind the superconductor strips.

12. The superconducting article of claim 1, wherein the at least one conductive bridge comprises a plurality of conductive bridges, comprised of superconductor material.

13. The superconducting article of claim 12, wherein the superconductive strips and plurality of conductive bridges substantially coplanar, formed from a patterned layer of superconductive material.

14. The superconducting article of claim 12, wherein the conductive bridges are spaced apart generally periodically along a length of the substrate.

15. The superconducting article of claim 1, wherein the article comprises a minimum of one bridge per 100m of substrate.

16. The superconducting article of claim 1, wherein article comprises at least one bridge per 50m of substrate.

17. The superconducting article of claim 1, wherein article comprises at least one bridge per 10m of substrate.

18. The superconducting article of claim 1, wherein article comprises at least one bridge per 1m of substrate.

19. The superconducting article of claim 12, wherein the conductive bridges are spaced apart generally periodically along a length of the substrate.

20. The superconducting article of claim 1, further comprising at least one conductive shunt layer overlying the superconductor layer.

21. The superconducting article of claim 1, further comprising a biaxially textured layer, over which the superconductor layer is provided.

22. The superconducting article of claim 21, wherein the biaxially textured layer comprises an IBAD layer.

23. The superconducting article of claim 1, wherein the superconductor strips are comprised of a high temperature superconductor.

24. The superconducting article of claim 23, wherein the high temperature superconductor comprises $REBa_2Cu_3O_{7-x}$, wherein RE is a rare earth element.

25. The superconducting article of claim 24, wherein the superconductor material comprises $YBa_2Cu_3O_7$.

26. The superconducting article of claim 1, wherein the substrate has a dimension ratio of not less than 10^2.

27. The superconducting article of claim 1, wherein the substrate has a dimension ratio of not less than 10^3.

28. The superconducting article of claim 1, wherein the article is in the form of a superconducting tape.

29. The superconducting article of claim 1, wherein the substrate, the superconductive strips, and the conductive bridges form a superconductive tape, the article comprising a coil having a plurality of superconductive tapes.

30. The superconducting article of claim 1, wherein the article is a power transformer, the power transformer comprising at least a primary winding and a secondary winding, wherein at least one of the primary winding and secondary winding comprises a wound coil of superconductive tape, the superconductive tape comprising said substrate, said superconductor strips, and said conductive bridges.

31. The superconducting article of claim 1, wherein the article is a rotating machine, the rotating machine comprising at least one winding, wherein the at least one winding comprises a superconductive tape formed of said substrate, said superconductor strips, and said conductive bridges.

32. The superconducting article of claim 31, wherein the rotating machine is a power generator or motor.

33. A method for forming a superconducting tape, comprising:
depositing a superconductor layer overlying a substrate, the substrate having a dimension ratio of not less than 10^2; and
patterning the superconductor layer by photolithography.

34. The method of claim 33, wherein the patterning is carried out in a reel-to-reel process.

35. The method of claim 33, wherein patterning is carried out by depositing a photolithographic layer, and exposing the photolithographic layer to pattern the photolithographic layer, wherein exposing is carried out by a step and repeat process such that the photolithographic layer is exposed in discrete sections.

36. The method of claim 33, wherein patterning is carried out by depositing a photolithographic layer, and exposing the photolithographic layer to pattern the photolithographic layer, wherein exposing is carried out in a continuous process such that the substrate is translated during exposing.

37. The method of claim 33, wherein the substrate has a dimension ratio of not less than about 10^3.

38. The method of claim 33, wherein the substrate has a dimension ratio of not less than about 10^4.

39. The method of claim 33, further comprising depositing a buffer layer overlying the substrate, the superconductor layer overlying the buffer layer.

40. The method of claim 33, further comprising depositing an electrical shunt layer overlying the superconductor layer.

41. The method of claim 40, wherein the electrical shunt layer is deposited prior to patterning.

42. The method of claim 40, wherein the electrical shunt layer is deposited after patterning.